

ISOPTERA

Termitidae.—*Odontotermes obesus* (Ramb.).

EMBIOPTERA

Embiidae.—*Oligotoma saundersi* Westw.

HEMIPTERA

Delphacidae.—*Delphacodes propinqua* Fieb. (December), and
Perigrinus maidis Ashm.

LEPIDOPTERA

Pyrilidae.—*Phycita* sp.

Bombycidae.—*Trilochoa fieicola* Westw.

Geometridae.—*Scopula cleoraria* Wlk.

Agrotidae.—*Acantholipes circumdata* Wlk., *A. circumflueta* Wlk., *Gesonia obeditalis* Wlk. and *Ozarba* sp. nr. *lepida* Saalm.

COLEOPTERA

Elatерidae.—*Cardiophorus notatus* Oliv. (May).

Curculionidae.—*Myloccerus cardoni* Mshll. (August).

Geotrupidae.—*Bolboceras quadridens* F. (August).

Aphodiidae.—*Aphodius reichei* Har.

HYMENOPTERA

Braconidae.—*Heterogamus* sp. nr. *percurrans* Lyll.

DIVISION OF ENTOMOLOGY,
DEPARTMENT OF AGRICULTURE,
BANGALORE,
December 28, 1954.

S. USMAN

28. NOTES ON *THRIPS PALMI* KARNY, ATTACKING *SESAMUM INDICUM*

(With a plate and a text-figure)

Ramakrishna and Margabandhu (1939) have recorded *Thrips gossypicola* Priesner from Coimbatore and the author has also noted *Trypactothrips rutherfordi* Bagnall, on sesamum plants, without any injurious effects. Quite recently the author came across a localised group of sesamum plants in Madras badly attacked by *Thrips palmi* Karny, which ultimately resulted in the malformation of the stamens, injury to the ovarian wall and ultimately the development of a dark pigment on the fruit wall, instead of the usual green colour.

Previous records of *Thrips palmi* Karny, in India, show that they have been recorded on tobacco, lablab flowers and lantana flowers, with no special effects of injury.

Adult female: It is pale yellow and is characterised by 'third antennal joint about as long as the sixth; head shorter than pronotum; upper vein of forewing distally with three setae; lower vein 11-13; costa with 20-22 setae'. Total length of female 1.16 mm. (average).

Males: The males are smaller than the females and have 'abdominal sternites without pale depressed areas; costa with 20-22 setae. The four long setae on the 9th tergite equidistant from each other.' Total length of male 0.91 mm. (average).

On an average, in each flower were found 4-8 adults and 8-20 larvae. Oviposition is between the anther lobes of the stamens at their free ends, the eggs being small, oval, yellowish white, measuring on an average, 0.238 mm. long and 0.196 mm. broad at middle.

Larval Stages: The first instar larva is about 0.58 mm. long and is pale yellow in colour with the body segments almost clearly defined. The maxillary palps are distinct 3-jointed, but reduced in size. The antenna is 100 μ in length. The last abdominal segment bears dorsally a pair and laterally two pairs of well-defined and long bristles. Anal bristles are moderately long, measuring 100 μ .

The second instar larva is much longer and is about 0.8 mm. long. The bristles on the thoracic and abdominal segments are more conspicuous. The maxillary palps are well defined with basal joint the shortest and the stoutest and the distal one longest and thinnest. The antenna is distinctly 7-jointed and 116 μ long.

Effects of injury: The stamens were observed to be completely malformed and are as represented in the figure. The larvae were observed to congregate round the base of the corolla tube, feeding on



FIG. 2. (a) Normal stamens with egg between anther lobes.
(b) Malformed stamens.

the walls of the ovary. As a result of the constant punctures made by the stylets, the walls of the ovary showed a number of dark patches. The general epidermis of the fruits which are green in normal ones, develops black pigment.



A

FIG. 1. A.—Attacked sesamum plant showing fruits with dark pigment.
a.—*Thrips palmi*, female.